

CONVENTIONAL MOSFET

**FIG. 1**  
**(PRIOR ART)**



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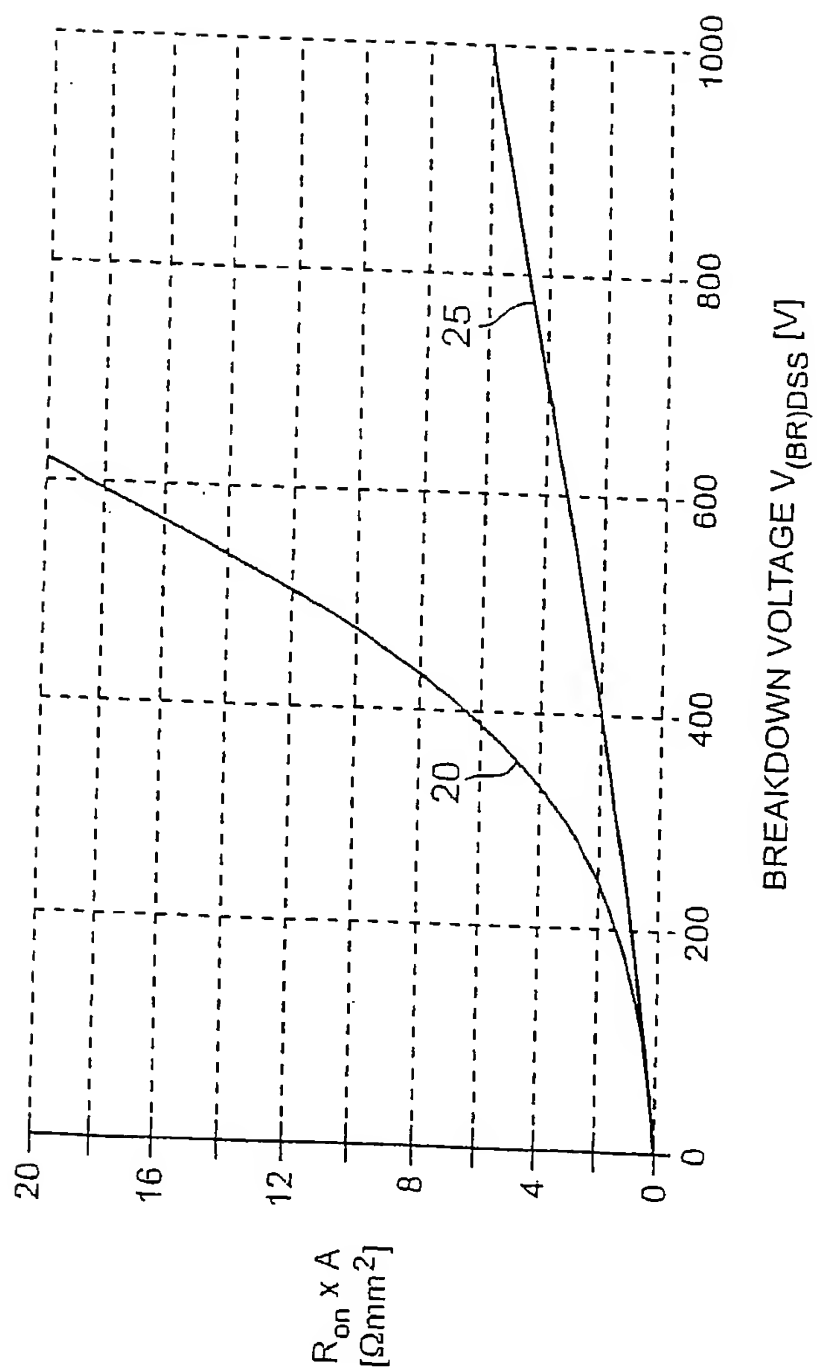


FIG. 2



1. GROW/DEPOSIT A TRENCH ETCH-STEP LAYER
2. MASK AND ETCH THE TRENCH ETCH-STEP LAYER
3. ETCH THE TRENCH USING A GAS THAT CONTAINS THE DESIRED DOPANT SPECIES

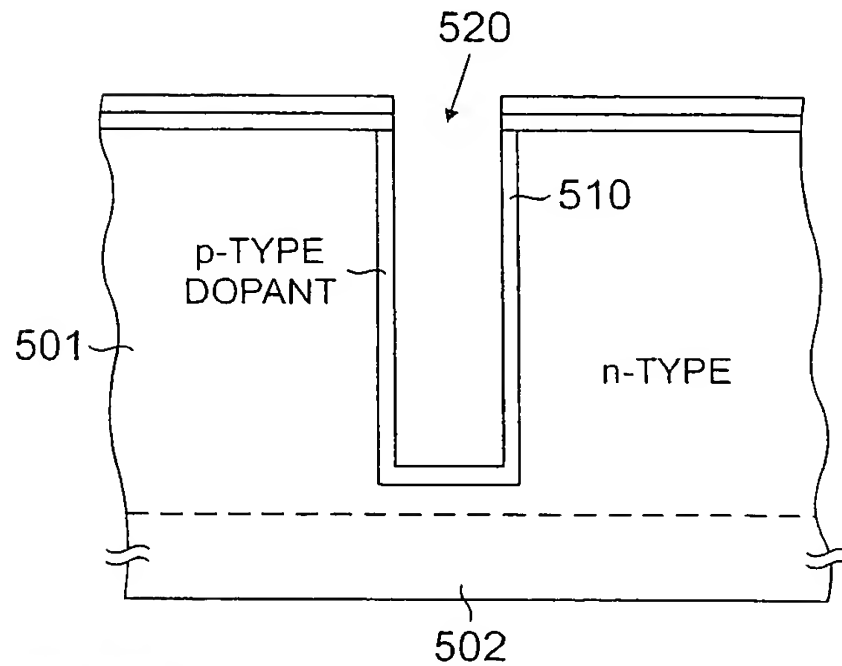


FIG. 4A

4. FILL THE TRENCH WITH A DIELECTRIC OR A HIGH RESISTIVITY LAYER
5. PLANARIZE
6. DIFFUSE THE DOPANT TO FORM THE DESIRED JUNCTION

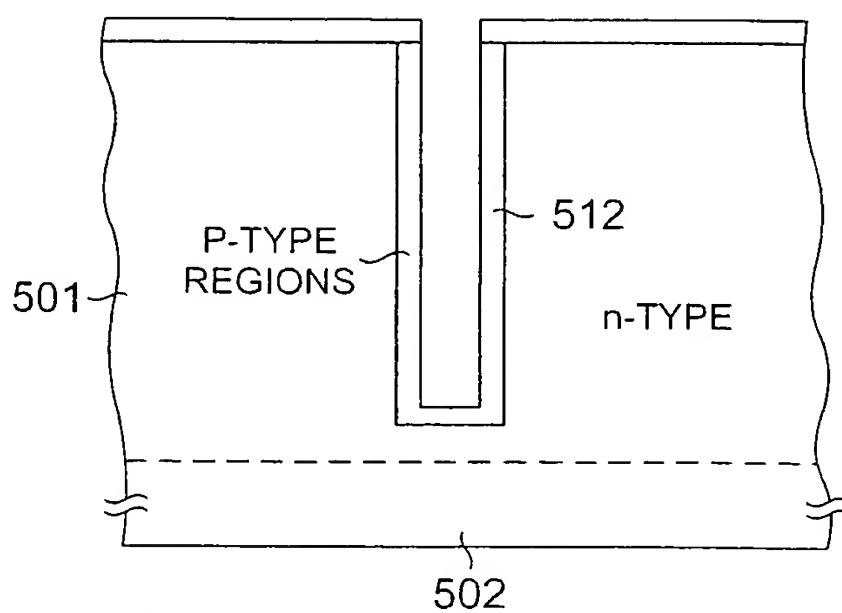


FIG. 4B

